

How Stages Correlates with Anchorage School District Performance Standards¹

Mathematics Grades K-3 Courses and Performance Standards (Grade Levels in Bold)

ASD Mathematics Course 1: Estimation.

(K)2. Estimate sets of objects using “more” and “less”.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Compare (Explore), Assess Estimating, Assess Spatial Relationships

ASD Mathematics Course 2: Number Sense.

(K) 1. Demonstrate a 1 to 1 correspondence with numbers and objects up to 20.

6. Use manipulatives to identify and describe the fractions $\frac{1}{2}$.

7. Use manipulatives to represent numbers to 20.

8. Count pennies to 20¢, dimes to \$1 and nickels to 25¢.

(1) 2. Read and write numbers to 100.

5. Compare and order numbers to 100.

6. Use manipulatives to show that fractions are parts of a whole.

11. Use a variety of coins to show multiple ways to make a dollar.

(2) 6. Read and write simple fractions.

12. Model coin/dollar equivalencies.

13. Count assorted bills and coins to \$50.

(3) 12. Model fractions and decimals using real world examples.

13. Count assorted bills and coins to \$100.

14. Make change by counting up from the amount of purchase to \$10.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Number ID, Counting

Stage Five: Math: Fractions

Problem Solving: Number Guess

Stage Six: Explore: Using Money

Assess: Money Equivalents, Counting Money

¹ Information found in Anchorage School District Performance Standards for Mathematics and for Language Arts, 2001 (Printed from World Wide Web on December 19, 2001).

Source: <http://www.asd.k12.ak.us/Depts/math/elperf.htm> and

<http://www.asdk12.org/depts/itech/deptpages/resources/asdstandards/ela.asp>

ASD Mathematics Course 3: Concepts of Number Operations.

- (K) 1. Model, record, explain addition and subtraction to a sum of 10.
 - 4. Tell and solve number stories to a sum of 10.
- (1) 1. Model, record, explain addition and subtraction to a sum of 20.
 - 2. Tell and solve number stories to sum of 20.
 - 4. Write fact families to sum of 20.
- (2) 3. Tell, write, and solve number stories to a sum of 50.
 - 4. Use manipulatives to show multiplication as repeated addition of sets, or an array.
- (3) 6. Demonstrate that “-” can mean take away, or difference.

Related Stages Assessment Activities:

Stage Five: Math: Math Facts (+, -, x, /), Word Problems (+, -, x, /)

ASD Mathematics Course 4: Computation.

- (1) 1. Memorize all the addition and subtraction facts to sum of 10.
- (2) 1. Memorize all the addition and subtraction facts to sum of 20.
- (3) 1. Add and subtract with regrouping, to a sum of 1000.
 - 3. Memorize multiplication and division facts to product of 50.
 - 4. Write fact families for products to 50.
 - 5. Tell or write and solve number stories for products to 50 and sums to 100.
 - 7. Use mental math when appropriate.

Related Stages Assessment Activities:

Stage Five: Math: Math Facts (+, -, x, /), Word Problems (+, -, x, /)

ASD Mathematics Course 5: Geometry.

- (K) 1. Identify circle, triangle, square, rhombus, rectangle, hexagon, and oval (or ellipse).
 - 2. Identify these basic shapes in the real world.
- (2) 5. Use comparative directional and positional words; above, below, inside, outside, on, in, right, left, horizontal, vertical, and middle.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Compare (Explore), Assess Spatial Relationships
Shape ID (Explore, Assess)

ASD Mathematics Course 6: Measurement.

- (K) 4. Tell time to the hour.
 - 6. Identify and tell value of penny, nickel, dime and quarter.
- (1) 4. Tell time to the half hour.
- (2) 7. Tell time to the nearest quarter hour, distinguishing between morning, afternoon, and evening.
- (3) 3. Compute area and perimeter of given squares and rectangles using manipulatives or grids.
 - 4. Use manipulatives to find the perimeter of irregularly shaped figures.
 - 5. Compare various triangles and quadrilaterals according to their sides and/or angles.

Related Stages Assessment Activities:

Stage Five: Math: Geometry (Explore, Assess)

Problem Solving: Mystery Shapes

Stage Six: Explore: Telling Time, Money Orientation

Assess: Telling Time, Money ID, Counting Money, Money Equivalents

ASD Mathematics Course 7: Statistics.

- (K) 1. Correctly use “first”, “middle”, “last”, “most”, and “least”.
- (1) 3. Use simple charts for reference, comparisons and record keeping.
 - 4. Communicate observations of graphed data.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Compare (Explore), Assess Estimating, Assess Spatial Relationships

Stage Five: Math: Charts and Graphs

ASD Mathematics Course 9: Patterns.

- (K) 2. Continue a 3 part pattern of numbers, objects or sounds.
- (1) 2. Describe the rule or relationship that determines a sequence and continue the sequence.
- (3) 3. Find, recognize, describe, and extend patterns.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Explore Patterns, Assess Patterns, Create Patterns

ASD Mathematics Course 11: Problem Solving.

- (2) 3. Translate problems from everyday language into mathematical language and symbols.

Related Stages Assessment Activities:

Stage Five: Math: Word Problems (+, -, x, /)

ASD Mathematics Course 13: Reasoning.

- (3) 1. Given a rule or generalization, determine whether or not the example fits.

Related Stages Assessment Activities:

Stage Five: *Problem Solving:* Practice, Mystery Shapes, Mystery People

ASD Mathematics Course 14: Connections.

- (2) 1. Observe and describe the relationship between whole numbers and fractions.

Related Stages Assessment Activities:

Stage Five: *Math:* Fractions (Explore, Assess)